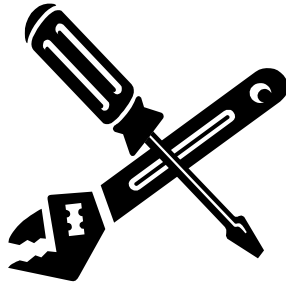


About Our Presenters

Mr. Steve Allbee - USEPA Project Director, Gap Analysis; primary author, USEPA's *The Clean Water and Drinking Water Infrastructure Gap Analysis*; 25 years EPA - development of financing programs; BA, MA, MPA.

Mr. Doug Stewart — Principal Consultant, GHD; former Asset Management Program Director, Orange County Sanitation District; 25 years engineering experience, 10 years utility management; Advanced Asset Management Instructor, University of CA - Irvine P.E.; BS, MSCE.

Mr. Duncan Rose - Vice President & Service Group Manager, Mgt Consulting - US, GHD; Former city/county manager; co-author of WEF's textbook, *Managing the Water and Wastewater Utility*, 30 years state & local government management; Adjunct Faculty, Florida State University, Askew School of Public Policy; BA, MSP, MAPA.



Workshop is March 29 & 30, 2006

Workshop handouts and materials can be found at
www.epa.gov/owm/featinfo.htm

Workshops will begin promptly at 8:00 am each day.

Sign-up for this workshop by contacting:

*Portland Water District
225 Douglass Street
Portland, ME 04104*

Phone: 707 774-5961 x3091

E-mail address: gjohnson@pwd.org

Advancing Asset Management In Your Utility:
A "Hands-on" Workshop Approach



*March 29 & 30, 2006
Nixon Training Facility
Portland Water District
225 Douglass Street
Portland, ME 04104*

Advancing Asset Management In Your Utility:

A "Hands-on" Workshop Approach

"America's water infrastructure is critical to our nation's environmental, economic, and social health. To help sustain our infrastructure, we should all be striving towards the goal of making Advanced Asset Management concepts and technologies the normal and expected condition of the service, everywhere".

Benjamin H. Grumbles,
Acting Assistant Administrator for Water, USEPA

Portland Water District

USEPA:

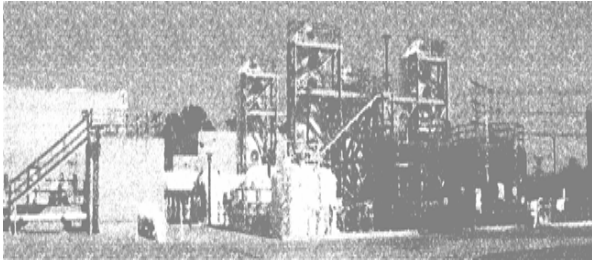
- ♦ Region I
- ♦ Office of Wastewater Management

Contract Content Providers:

- ♦ GHD Advanced Asset Management

Advancing Asset Management In Your Utility:

A “Hands-on” Workshop Approach



The Challenge:

Over the past half century, America has spent trillions of dollars building some of the finest infrastructure that history has ever seen. Indeed, this infrastructural investment has played a substantial role in the sustained wealth, prosperity, and quality of life of our country. But in many communities, this infrastructure is severely stressed from over-use, under-funding of maintenance and renewal, and aging.

A “hands-on” workshop for the senior utility manager

A comprehensive approach to managing our capital assets is overdue - one that brings “state of the practice” advanced asset management (“AAM”) concepts, tools, techniques, and technologies to bear on managing for cost-effective performance. This approach, first and foremost, is one that focuses relentlessly on providing sustained performance of value to the customer at the lowest life-cycle cost and at an acceptable level of risk to the organization.

The Focus:

The great French author, Victor Hugo, once observed, *“An invasion of armies can be resisted, but not an idea whose time has come.”* Public sector managers have been managing assets for decades. However, it is clear that what we have been doing in the past will not be sufficient to address the growing and increasingly complex challenges that lie ahead.

Practical, advanced techniques for better managing assets have been developed and refined in both the private sector in the US and in water and wastewater agencies around the world. Management thinking is centered on long-term effectiveness, service sustainability, and effective environmental management. *How can these advanced asset management concepts, tools and techniques be most effectively transferred into the water and wastewater industry, more specifically, into your agency? Where to start? How to proceed? How to select appropriate tools?*

The Workshops:

The AAM challenge for US agency officials is one of “knowledge transfer”. **For this reason, these workshops have been designed as an extensive “hands-on” experience.** Each workshop :

- ◆ **Incorporates a real-world “storyline”** to realistically demonstrate an advanced asset management way of approaching difficult asset-driven problems.
- ◆ Is built around **participant exercises** that demonstrate the concepts, techniques and tools of advanced asset management.
- ◆ Is centered on **“case-based” mentoring** by expert asset management practitioners.

The agenda is built around five core questions (see agenda, right panel). *The workshops focus on demonstrating, step-by-step, how an agency would select and deploy “Best Appropriate AM Practices” that are best suited to that agency.*

Agenda Highlights Day ONE (8:00 - 4:30)

Introductions

Storyline, Background And Context

- ◆ Introduction Of Storyline
- ◆ The Changing Utility Industry
- ◆ The Emerging Utility Of Tomorrow

Overview Of Fundamental Concepts And Core Practices

- ◆ A Definition Of AAM
- ◆ The AAM Paradigm
- ◆ The Nine Building Blocks Of AAM
- ◆ Managing The Asset Base’s “Potential To Fail”
- ◆ Payoffs And Benefits, Downsides

Storyline And Worksheets - Tom’s Very Bad Day

Core Question 1: What Is The Current State Of My Assets?

- ◆ The Role of Expert Judgment – The “Delphi Group”
- ◆ Building a “Process Layout” Schematic
- ◆ Creating The “Asset Hierarchy”
- ◆ Defining The “Data Standard”
- ◆ Initial Condition Analysis, Remaining Physical Life
- ◆ Valuation/Asset Consumption/Financial Disclosure From a GASB Perspective

Core Question 2: What Is My Required “Sustainable” Level Of Service (LOS)?

- ◆ What Is “LOS”? Why Do It?
- ◆ How It Works (Strategic Level Versus Operations Level)
- ◆ A “Balanced Scorecard” Approach

Core Question 3: Which Assets Are Critical To Sustained Performance?

- ◆ Understanding How My Assets Can Fail
- ◆ What The Likelihood Of Failure Is
- ◆ What The Consequences Are
- ◆ How To Measure Our Agency’s “Business Risk Exposure”?

Core Question 4: What Are My Best Minimum Life-Cycle-Cost CIP And O&M Strategies?

- ◆ What Alternative “Treatment” (Management) Options Are Feasible?
- ◆ Which Is The Best Strategy – “Optimal Renewal Decision Making”?

Discussion, Q & A And Feedback

Day TWO (8:00 - 3:30)

Summary Of Day 1, Outline Of Day 2

Core Question 4: O&M (Continued)

- ◆ Using AAM To Drive Operations And Maintenance
- ◆ Moving Systematically Into Reliability Centered And Condition-Based Maintenance

Core Question 4: CIP (Continued)

- ◆ Using AAM To Drive The CIP
- ◆ Strategic CIP Validation
- ◆ Building Your First Asset Management Plan (“AMP”) For The System
- ◆ Balancing CIP And O&M Requirements
- ◆ The Strategic CIP Business Plan

Core Question 5: What Is My Best Long-Term Funding Strategy?

- ◆ So, Valuation Really Does Matter?
- ◆ Determining A Sustainable Renewal Funding Level
- ◆ Effectively Telling The Funding Story
- ◆ The “Whole Of Business” Perspective – Using AAM For Rate Setting & Budgeting

Focus Topic 1: Deploying An AAM Program

- ◆ The Three Fundamental Deployment Strategies
- ◆ “Gap Analysis” Benchmarking & Developing The AAM Improvement Program
- ◆ The Human Side
- ◆ The Political Side
- ◆ Implementation Work Plans – Lessons Learned

Focus Topic 2: Meeting The IT Challenge - Toward An Enterprise Asset Management System (“EAMS”)

- ◆ Defining “Work Processes”
- ◆ Defining “System Functionality”
- ◆ Defining Data Needs And Data Flows
- ◆ Developing An EAMS Work Plan

Closing Summary, Questions, Comments, Evaluation, Discussion Of Basic Audit